

## REMARKS

The Office Action dated January 16, 2008 has been carefully reviewed. Claims 1-52 are pending in this application, each of which stand rejected in the 1/16/2008 Office Action. By this amendment, claims 1, 20, 31, and 50 are amended. Claims 13-16 and 44-47 are hereby cancelled without prejudice.

### 35 U.S.C. §103(a) REJECTIONS

The Examiner rejected claims 1-11, 15, 17, 18, 13-28, 30-42, and 44-52 as being unpatentable over Perry (U.S. Patent Publication No. 6,678,877) in view of Kumagai (U.S. Patent No. 6,496,957). The Examiner rejected claims 12, 29, and 43 as being unpatentable over Perry in view of Kumagai and in further view of Vilella (U.S. Patent Application Publication No. 2004/0208354).

#### Discussion: Independent Claim 1 - Perry & Kumagai

The Examiner rejected claim 1 as being unpatentable over Perry in view of Kumagai. Claim 1 has been amended to recite:

determining a plurality of work centers based on the user-supplied electronic assembly design data, each of the plurality of work centers defining a manufacturing process step of the electronic assembly,

determining a per-unit setup cost value and a per-unit run cost value for each work center of the plurality of work centers based on the assembly cost data,

summing the per-unit setup cost values to determine a total per-unit setup cost,

summing the per-unit run cost values to determine a total per-unit run cost,

summing the total per-unit setup cost value and the total per-unit run cost value to determine a total per-unit cost value, and

updating the user interface to display the total per-unit cost value.

Neither Perry nor Kumagai disclose separately, or in combination, such elements. In addition, in particular regard to Perry, Applicants note that the Examiner argues that “setup and run costs are component selections (costs of component) and simulations.” (1/16/2008 Office Action, page 5, first paragraph). While the PTO’s broadest reasonable interpretation standard does

provide the Examiner with some degree of latitude when construing the meaning of claim terms, Applicants assert that no one skilled in the art would interpret the claimed “per-unit setup cost values” and “per-unit run cost values” as “costs of components” and “simulations,” respectively. Rather, the “per-unit setup cost values” and “per-unit run cost values” are processing costs and are clearly set forth in the specification of the present application. For example, “[t]he setup cost is a one time cost value associated with the work center and is not dependent on the number of electronic assemblies to be assembled.” (see page 15, lines 17-18). Additionally, “[t]he run cost is a cost applicable to each electronic assembly to be manufactured.” (see page 16, lines 3-4). Knowing this, no one skilled in the art would characterize “costs of components” as “per-unit setup cost values” nor “simulations” as “per-unit run costs values.” As such, for at least the reasons provided above, the rejection of claim 1 should be withdrawn.

#### Discussion Re: Claims 2-19

Claims 2-12 and 17-19 include claim 1 as a base claim. As such, the rejection of claims 2-12 and 17-19 should be withdrawn for the reasons hereinbefore discussed with regard to amended claim 1. In light of the reasons for withdrawal of the rejection of claim 1, any arguments specific to claims 2-12 and 17-19 are held in abeyance without prejudice or admission to any assertion made by the Examiner in order to expedite prosecution.

#### Discussion: Independent Claim 20 - Perry & Kumagai

The Examiner rejected claim 20 as being unpatentable over Perry in view of Kumagai. Claim 20 has been amended to recite:

comparing the assembly design data to the assembly capability data to determine whether the assembly design data exceeds the manufacturing capability of the electronic assembly manufacturer, and

displaying indicia on the user interface if the assembly design data exceeds the manufacturing capability of the electronic assembly manufacturer, the indicia being configured to notify a user that the manufacturing capability of the electronic assembly manufacturer has been exceeded.

Neither Perry nor Kumagai disclose separately, or in combination, such elements. As such, for at least the reasons provided above, the rejection of claim 20 should be withdrawn.

#### Discussion Re: Claims 21-30

Claims 21-30 include claim 20 as a base claim. As such, the rejection of claims 21-30 should be withdrawn for the reasons hereinbefore discussed with regard to amended claim 20. In light of the reasons for withdrawal of the rejection of claim 20, any arguments specific to claims 21-30 are held in abeyance without prejudice or admission to any assertion made by the Examiner in order to expedite prosecution.

#### Discussion: Independent Claim 31 - Perry & Kumagai

The Examiner rejected claim 31 as being unpatentable over Perry in view of Kumagai. Claim 31 has been amended in a manner consistent with amended independent claims 1 and 20 discussed above. As such, all of the arguments presented above in regard to amended claims 1 and 20 are applicable to amended claim 31 and are incorporated in this section. Accordingly, for at least the reasons presented above in regard to claims 1 and 20, the rejection of claim 31 should be withdrawn.

#### Discussion Re: Claims 32-49

Claims 32-43, 48, and 49 each include claim 30 as a base claim. As such, the rejection of claims 32-43, 48, and 49 should be withdrawn for the reasons hereinbefore discussed with regard to amended claim 30. In light of the reasons for withdrawal of the rejection of claim 30, any arguments specific to claims 32-43, 48, and 49 are held in abeyance without prejudice or admission to any assertion made by the Examiner in order to expedite prosecution.

#### Discussion: Independent Claim 50 - Perry & Kumagai

The Examiner rejected claim 50 as being unpatentable over Perry in view of Kumagai. Claim 50 has been amended in a manner consistent with amended independent claims 1 and 20 discussed above. As such, all of the arguments presented above in regard to amended claims 1 and 20 are applicable to amended claim 50 and are incorporated in this section. Accordingly, for at least the reasons presented above in regard to claims 1 and 20, the rejection of claim 50 should be withdrawn.

Discussion Re: Claims 51 & 52-49

Claims 51 and 52 each include claim 50 as a base claim. As such, the rejection of claims 51 and 52 should be withdrawn for the reasons hereinbefore discussed with regard to amended claim 50. In light of the reasons for withdrawal of the rejection of claim 50, any arguments specific to claims 51 and 52 are held in abeyance without prejudice or admission to any assertion made by the Examiner in order to expedite prosecution.

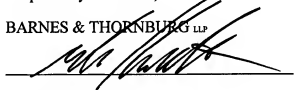
CONCLUSION

In view of the foregoing, claims 1-12, 17-43, and 48-52 are believed to be in condition for allowance. Action to that end is hereby solicited. If there are any questions or comments that would speed prosecution of this application, the Examiner is invited to call the undersigned at (317) 261-7959.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response. The Commissioner is hereby authorized to charge the fee for such Petition and any shortage of fees, and credit any overpayment of fees, to the Account of Barnes & Thornburg, Deposit Account No. 10-0435 with reference to file 6890-74182.

Respectfully submitted,

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